Docket No. PM 2000.062
"Computer System and Method Having a Facility
Network Architecture"
Inventors: Stephen C. Netemeyer, et al.
Attorney: Gary D. Lawson (713-431-4846)
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FIG. 1

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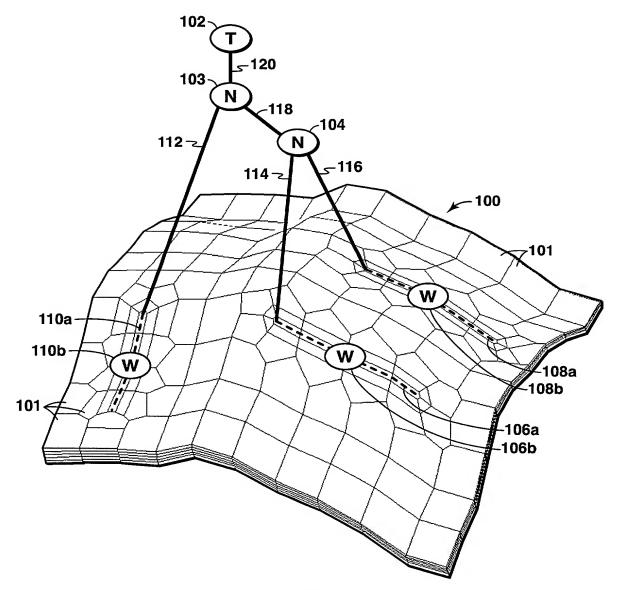Attorney: Gary D. Lawson (713-431-4846)
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FIG. 2

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300

VarBase

301

VariableAttributesBase

302

FacilityType

303

FacilityTypeSystemAttributes

0..1

facility_has_system_attributes   **305**

304   0..*

AttributeDefinition

FIG. 3

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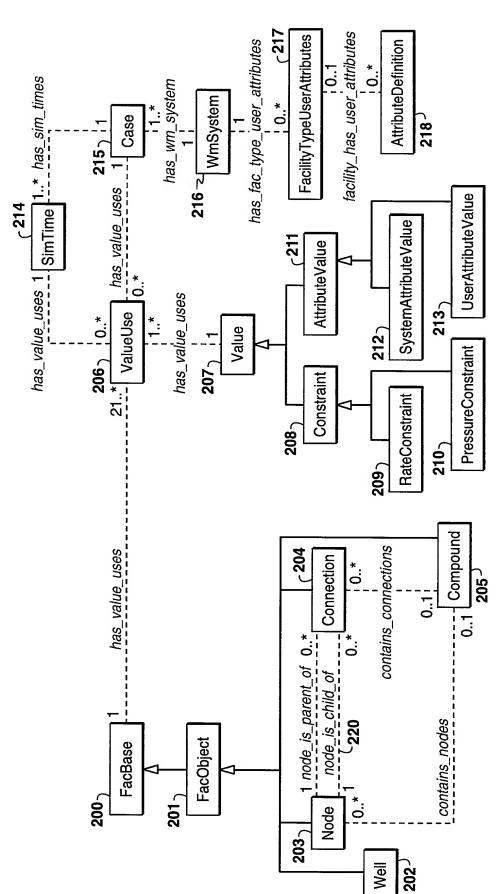Attorney: Gary D. Lawson (713-431-4846)
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FIG. 4

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FIG. 5

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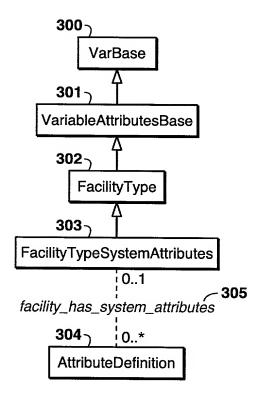Attorney: Gary D. Lawson (713-431-4846)
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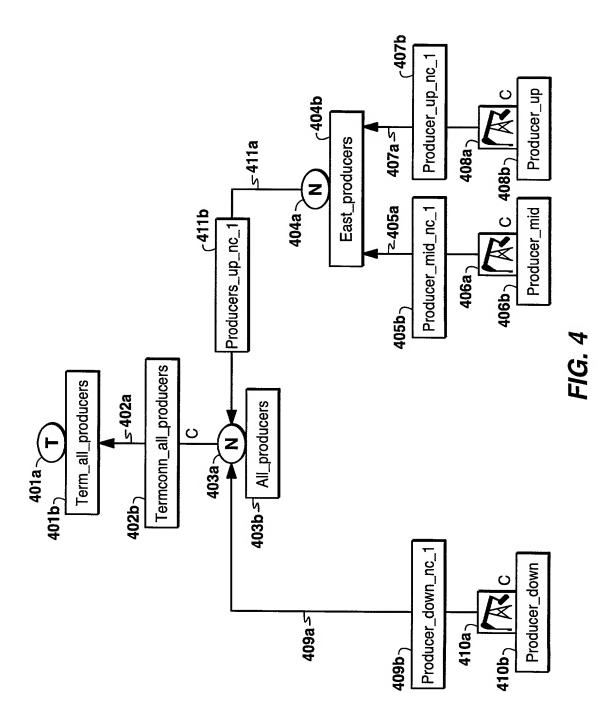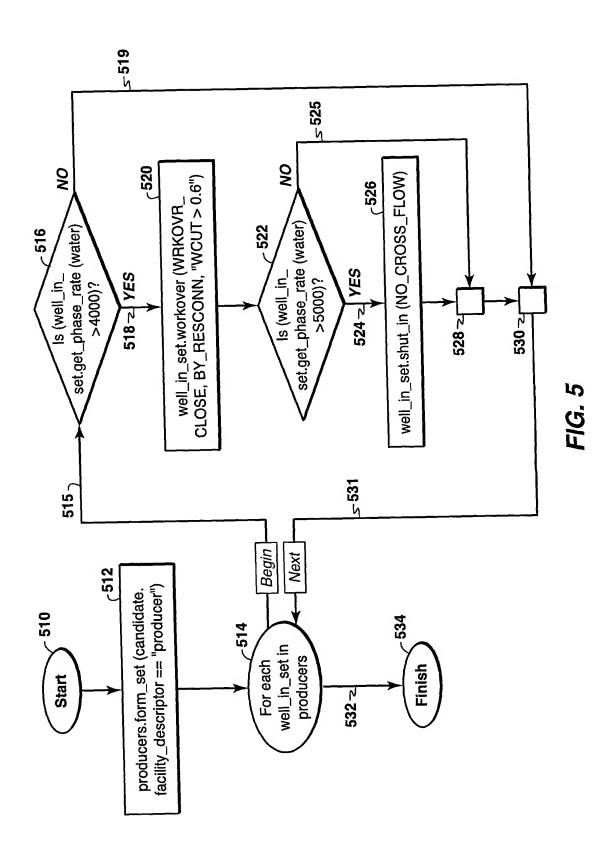"Simulator" side:
• data and operations
• this is what the simulator needs to run

611

604

Class: Object
Inherits from: ObjectInterface

Lots of data and operations...

610

606

608

Class: Well
Multiple inheritance from:
Object and WellInterface

Lots of data and operations...
shut_in()
open()

609

600

Class: ObjectInterface

No data and empty operations...

602

Class: WellInterface
Inherits from: ObjectInterface

No data and empty operations...
shut_in() = 0
open() = 0

"Interface" side:
• no data and empty operations
• this is what the logic compiler "sees"
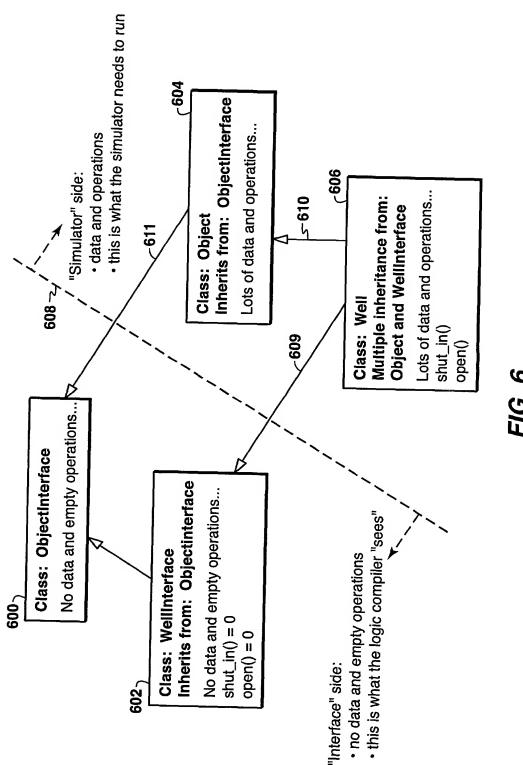
FIG. 6

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"Simulator" side:
• data and built-in operations
• this is what the simulator needs to run

706

Class: Object
Lots of data and operations...

708

Class: Well
Lots of data and operations...
shut_in()
open()

700

Class: ObjectInterface
No data and empty operations...

710

702

Class: WellInterface
No data and empty operations...
shut_in() = 0
open() = 0

704

Class: WellInterface_User
Declared at run-time by the parser

Defines new user operations...
special well logic()

"Interface" side:
• no data and empty built-in operations
• declaration and code for user operations
• this is what the logic compiler "sees"

FIG. 7